

Adopt Env-Ws 390 to read as follows:

Part Env-Ws 390 WATER CONSERVATION RULES

Statutory Authority: RSA 485:61

Env-Ws 390.01 Purpose and Scope. The purpose of these rules is to establish water conservation standards as required by RSA 485:61.

Env-Ws 390.02 Applicability.

(a) Pursuant to RSA 485:61, II, these rules shall apply to applicants for permits and applications for water withdrawal subject to the provisions of RSA 485:3, RSA 485:48, RSA 485-C:21, and section 401 of the federal Clean Water Act, including:

- (1) New sources of groundwater for community water systems;
- (2) New sources of groundwater for bottled and bulk water operations;
- (3) New sources of groundwater that exceed 57,600 gallons over any 24-hour period; and
- (4) New surface water sources of water supply associated with projects that require a water quality certification pursuant to Section 401 of the federal Clean Water Act.

(b) Pursuant to RSA 485:61, II, these rules shall apply to consecutive water systems receiving water from wholesale water systems subject to the requirements in (a), above.

(c) These rules shall not apply to consecutive water systems described in (b), above, if the consecutive water system is no longer adding additional connections to the water system.

(d) These rules shall not apply to new sources of water developed after the effective date of these rules that are replacements for existing sources of water, provided:

- (1) The replacement source withdraws either less than or the same amount of water the existing source has historically been demonstrated to withdraw; and
- (2) The existing source being replaced is abandoned in accordance with the requirements of We-100-We-1000.

Env-Ws 390.03 Definitions.

(a) “Agriculture water user” means all entities using water for operations at a farm as defined by RSA 21:34-a.

(b) “Automatic irrigation system” means an interconnected network of pipes, pumps, valves, and emitters designed to provide water to growing plant material, that is operated by a

remote control valve controlled by a mechanical or electronic clock programmed to operate at specified times.

(c) “Bottled water” means water that is placed in a sealed container or otherwise packaged and offered for sale for human consumption or other consumer uses.

(d) “Bulk water” means water intended for potable uses which is transported in containers greater than 10 gallons for the purpose of treatment, packaging or human consumption.

(e) “Community water system” means a community water system as defined in RSA 485:1-a, I, namely “a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.”

(f) “Consecutive water system” means a public water system that buys or otherwise receives some or all of its finished water from one or more wholesale systems for at least 60 days per year.

(g) “Groundwater” means “groundwater” as defined in RSA 485:C:2, VIII, namely, “subsurface water that occurs beneath the water table in soil and geologic formations.”

(h) “Industrial, Commercial and Institutional” (ICI) water users means all water users that are not:

- (1) Serviced by a community water system; or
- (2) An agriculture water user.

(i) “Large community water system” means a public water system serving a population that exceeds 1,000 persons at least 8 months in a calendar year.

(j) “Large groundwater withdrawal” means any seasonal or year-long withdrawal from a wellhead installed after July 1998, not associated with a temporary, short-term use such as contaminated site management or construction de-watering, where the maximum 24-hour withdrawal is 57,600 gallons or more.

(k) “Loam” means a loose friable topsoil that combines relatively equal parts of sand, clay, and silt and that is generally free from stones, lumps, stumps, roots, weeds, or similar objects larger than 2 inches.

(l) “Public Water System” means a “public water system” as defined in RSA 485:1-a, XV.

(m) “Small community water system” means a public water system that is not a large community water system.

(n) “Surface water” means surface waters of the state” as defined in RSA:485-A:2, XIV.

(o) “Unaccounted-for water” means water for which a specific use can not be determined due to accounting procedure errors, data processing errors, meter inaccuracies, authorized water use that does not pass through meters, leaks, seepage, overflow, evaporation, theft, unauthorized water use, or malfunctioning distribution controls.

(p) “Water conservation” means “water conservation” as defined in RSA 485:1-a, XIX namely, “any beneficial reduction in water losses, waste, or use.”

(q) “Wellhead” means the conveyance or conveyances through which, and location where, groundwater reaches the land surface such as the well casing, well field collector, or spring collection box.

(r) “Wholesale system” means a public water system that treats source water and then sells or otherwise delivers finished water to another public water system for at least 60 days per year.

Env-Ws 390.04 Requirements for New Community Water Systems.

(a) Community water systems that are subject to RSA 485:3 and which are established after the effective date of these rules shall comply with the requirements specified in this section.

(b) Each water system shall install water meters for all of the following:

- (1) Public sector water users except for firefighting;
- (2) Private water users; and
- (3) All sources of water.

(c) The water system shall ensure that the water meters required by paragraph (a) are sized in accordance with the specifications of the manufacturer.

(d) In selecting, installing, and maintaining water meters, the water system shall comply with procedures and protocols described in “Manual of Water Supply Practices, Water Meters-Selection, Installation, Testing, and Maintenance,” document identification number AWWA M6, American Water Works Association, 1999.

(e) The water system shall read the water meters required by (b)(1) or (2), above at least once every 90 days.

(f) The water system shall read the water meters required by (b)(3), above, at least once every 30 days.

(g) The water system shall implement a water audit and leak detection program in accordance with “Manual of Water Supply Practices, Water Audits and Leak Detection” document identification number AWWA M36, American Water Works Association, 1999.

(h) The water system shall repair all leaks identified by the activities required by (g), above, within 60 days of discovery. If a leak is of such a size or in such a location that it is not feasible to repair the leak within 60 days of discovery, the water system may request an alternative schedule from the department.

(i) The water system shall estimate the volume and percentage of unaccounted-for water once every year using protocols and procedures described in "Manual of Water Supply Practices, Water Audits and Leak Detection" document identification number AWWA M36, American Water Works Association, 1999.

(j) The water system shall prepare and submit a response plan to the department within 60 days if the percentage of unaccounted for water in the water system calculated pursuant to (i), above, exceeds 15% of the total water introduced to the water system.

(k) The response plan prepared pursuant to (j), above, shall identify how the water system intends to reduce the percentage of unaccounted-for water to below 15% within 2 years, except for leaks that have been identified which must be repaired in accordance with (h), above.

(l) The water system shall implement the response plan in accordance with the approved schedule upon receiving approval from the department.

(m) The water system shall implement pressure reduction upon obtaining approval of a new source of water when:

- (1) Technically feasible;
- (2) Consistent with water system industry standards and regulations; and
- (3) Consistent with other public health and safety considerations.

(n) The water system shall adopt a rate structure that promotes water conservation.

- (1) The rate structure shall be based on:
 - a. A unit price of water; and
 - b. The amount of water used by each connection to the water system; and
- (2) The unit price of water for residential connections shall:
 - a. Remain the same; or
 - b. Increase with the volume of water consumed.

(o) The water system shall complete a water conservation educational outreach initiative using materials prepared by the department as follows:

- (1) The water system shall implement the applicable public notification and outreach requirements to municipal governments within its service area in accordance with Env-Ws 390.11; and
 - (2) The water system shall implement an educational outreach initiative for its customers to promote water conservation immediately upon obtaining approval for the new source subject to the laws or regulations described by Env-Ws 390.02.
- (p) Activities completed in accordance with (b) through (o), above, shall be completed by:
- (1) Water system personnel who by education and experience are qualified to complete the required activities and assessments; or
 - (2) Water system personnel under the direct supervision of a certified operator pursuant to Env-Ws 367.

Env-Ws 390.05 Requirements for Existing Large Community Water Systems.

- (a) An existing large community water system shall implement the measures described in this section.
- (b) Each large community water system shall install water meters within 3 years of obtaining approval for a new source of water that is subject to RSA 485:3 for all of the following:
- (1) Public sector water users except for firefighting;
 - (2) Private water users; and
 - (3) All sources of water.
- (c) The water system shall ensure that the water meters are sized in accordance with the specifications of the manufacturer.
- (d) In selecting, installing, and maintaining water meters, the water system shall comply with procedures and protocols described in “Manual of Water Supply Practices, Water Meters-Selection, Installation, Testing, and Maintenance,” document identification number AWWA M6, American Water Works Association, 1999.
- (e) The water system shall read the water meters required by (b)(1) and (2), above, at least once every 90 days.
- (f) The water system shall read the water meters required by (b)(3), above, at least once every 30 days.
- (g) The water system shall implement a water audit and leak detection program in accordance with “Manual of Water Supply Practices, Water Audits and Leak Detection”

document identification number AWWA M36, American Water Works Association, 1999, within one year of obtaining approval for a new source of water.

(h) The water system shall repair all leaks identified by the activities required by (g) within 60 days of discovery. If a leak is of such a size or in such a location that it is not feasible to repair the leak within 60 days of discovery, the water system may request an alternative schedule from the department.

(i) The water system shall estimate the volume and percentage of unaccounted-for water in the water system once every year using protocols and procedures described in "Manual of Water Supply Practices, Water Audits and Leak Detection" document identification number AWWA M36, American Water Works Association, 1999.

(j) The water system shall prepare and submit a response plan to the department within 60 days if the percentage of unaccounted for water in the water system calculated pursuant to (i), above, exceeds 15% of the total volume of water introduced to the water system.

(k) The response plan prepared in accordance with (h), above, shall identify how the water system intends to reduce the percentage of unaccounted-for water to below 15% within 2 years, except for leaks that have been identified which must be repaired in accordance with paragraph (h).

(l) The water system shall implement the response plan in accordance with the approved schedule upon receiving approval from the department.

(m) The water system shall implement pressure reduction within one year of obtaining approval of a new source of water when:

- (1) Technically feasible;
- (2) Consistent with water system industry standards and regulations; and
- (3) Consistent with other public health and safety considerations.

(n) The water system shall adopt a rate structure that promotes water conservation within 5 years of obtaining approval for a new source of water, as described below:

- (1) The rate structure shall be based on:
 - a. A unit price of water; and
 - b. The amount of water used by each connection to the water system; and
- (2) The unit price of water for residential customers shall:
 - a. Remain the same; or
 - b. Increase with the volume of water consumed.

(o) The water system shall complete a water conservation educational outreach initiative using materials prepared by the department as follows:

(1) The water system shall implement the applicable public notification and outreach requirements to municipal governments within its service area in accordance with Env-Ws 390.11; and

(2) The water system shall implement an educational outreach initiative for its customers to promote water conservation immediately upon obtaining approval for the new source.

(p) Activities completed in accordance with (b) through (o), above, shall be completed by:

(1) Water system personnel who by education and experience are qualified to complete the required activities and assessments; or

(2) Water system personnel under the direct supervision of a certified operator pursuant to Env-Ws 367.

Env-Ws 390.06 Requirements for Existing Small Community Water Systems and Certain Water Systems Owned By Landlords.

(a) The requirements in this section shall apply to:

(1) An existing small community water system; and

(2) A new or existing water system owned by a landlord who supplies water only to tenants and includes water service in a rental fee.

(b) The water system shall either:

(1) Comply with the metering and water accounting requirements for existing large community water systems as described in Env-Ws 390.05; or

(2) Conduct a comprehensive leak detection survey of the distribution system every 2 years.

(c) If the water system elects to conduct a comprehensive leak detection survey, the water system shall complete the survey in accordance with procedures and protocols described in Chapter 3 and 4 of the "Manual of Water Supply Practices, Water Audits and Leak Detection" document identification number AWWA M36, American Water Works Association, 1999.

(d) The water system shall repair all leaks identified by the activities required by (c), above, within 60 days of detection. If a leak is of such a size or in such a location that it is not feasible to repair the leak within 60 days of discovery, the water system may request an alternative schedule from the department.

(e) The water system shall implement pressure reduction within one year of obtaining approval of a new source of water when:

- (1) Technically feasible;
- (2) Consistent with water system industry standards and regulations; and
- (3) Consistent with other public health and safety considerations.

(f) The water system shall complete a water conservation educational outreach initiative using materials prepared by the department as described below:

- (1) The water system shall implement the applicable public notification and outreach requirements to municipal governments within its service area in accordance with Env-Ws 390.11; and
- (2) The water system shall implement an educational outreach initiative for its customers to promote water conservation immediately upon obtaining approval for the new source.

(g) Activities completed in accordance with paragraphs (b) through (f), above, shall be completed by:

- (1) Water system personnel who by education and experience are qualified to complete the required activities and assessments; or
- (2) Water system personnel under the direct supervision of a certified operator pursuant to Env-Ws 367.

Env-Ws 390.07 Requirements for All Agricultural Water Users. All water users who irrigate crops or use water for animal operations associated with agriculture shall implement irrigation processes in accordance with the 1998 edition of the Irrigation Best Management Practices for Agriculture in New Hampshire, published by the department of agriculture, markets and food.

Env-Ws 390.08 Requirements for Industrial, Commercial, and Institutional Water Users (ICI)

(a) ICI water users shall identify the location and amount of water used for existing and anticipated future uses of water associated with the following:

- (1) Heating;
- (2) Cooling;

- (3) Processing;
- (4) Product ingredient;
- (5) Sanitary use; and
- (6) Outdoor water use.

(b) ICI water users shall install and maintain water meters as described below prior to initiating a withdrawal from a new source of water:

- (1) Water meters shall be installed for each groundwater and surface water source; and
- (2) Water meters shall be maintained in accordance with “Manual of Water Supply Practices, Water Meters-Selection, Installation, Testing, and Maintenance,” document identification number AWWA M6, American Water Works Association, 1999.

(c) If water is used in a single-pass cooling system, the water user shall replace or retrofit the process to achieve maximum water efficiency within 5 years of initiating a withdrawal from a new source of water by using one or more of the following methods:

- (1) Recirculating cooling techniques;
- (2) The use of sensors and automatic shut-off devices to reduce water used for cooling processes;
- (3) Implementation of water treatment processes;
- (4) Air cooling techniques; or
- (5) Alternative technology that produces results equivalent to processes described in (1) through (4), above.

(d) Processes that result in the discharging of unused water to waste shall be identified and modified as described below:

- (1) Any processes where water is used to control temperature shall be identified; and
- (2) Any process where water within a given process may discharge unused water to waste through an overflow shall be identified;

(e) Processes identified in (d), above, shall be modified within 5 years of initiating a withdrawal from a new source of water by using one or more of the following methods:

- (1) Automatic shut-off devices preventing the discharge of water to waste shall be installed for all processes identified in (1) and (2) above; and

(2) Sensors that optimize the use of water shall be installed for all processes identified in (1) and (2) above.

(f) Water conservation practices not described in paragraphs (a) through (e), above, shall be implemented as described below:

(1) The water user shall provide the department a description of water conservation best management practices or best available technologies that may be applicable to the types of water-using processes at the facility;

(2) The water user shall develop a plan and schedule to implement the plan that demonstrates these processes will be implemented within 5 years; and

(3) The water users shall implement the plan according to the schedule upon obtaining conditional approval from the department pursuant to Env-Ws 390.10.

(g) ICI water users shall not be required to implement a measure described in (c) though (f), above, if an economic analysis shows that the payback period for the measure is more than 4 years.

(h) The economic analysis in (g), above, shall factor the true cost of the water use, including:

(1) The cost of energy to pump and transmit water;

(2) The cost of treating pumped water;

(3) Cost of disposing of wastewater;

(4) Capital costs associated with developing new sources of water; and

(5) All other costs or fees associated with obtaining or disposing of the water.

(i) If an ICI water user is establishing new lawns, it shall immediately implement the following water efficiency processes:

(1) All new automatic watering devices used to irrigate the lawns, shall be equipped with technology that will prevent the systems from starting automatically when not needed;

(2) All automatic watering systems installed after the effective date of this document shall be audited at no less than once every 3 years to ensure the technology required by (1), above, is functioning properly; and

(3) All new lawn areas shall be underlain by 6 inches of loam.

(j) The requirements of (i), above, shall not apply to lawns associated with golf courses or agriculture uses.

Env-Ws 390.09 Waivers

(a) The rules contained in this part are intended to apply to a variety of conditions and circumstances. It is recognized that strict compliance with all rules prescribed herein might not fit every conceivable situation. Thus, persons subject to these rules may request a waiver of specific rules outlined in this part in accordance with this section.

(b) All requests for waivers shall be submitted in writing to the department and shall include the following information:

- (1) The name, mailing address, and location of the water system requesting the waiver;
- (2) The name, daytime telephone number and, if available, fax number and e-mail address of the individual at the water system who is knowledgeable about the request;
- (3) A description of the facility or site to which the waiver request relates, including the population served by the water system;
- (4) A reference to the specific section of the rules from which a waiver is being sought;
- (5) A full explanation of why a waiver is necessary, including the hardship that will be suffered if a waiver is not granted;
- (6) A full explanation with supporting data of the alternative(s), if any, proposed to be implemented or used in lieu of the section's requirements; and
- (6) A full explanation of how the proposed alternative(s), if any, is consistent with the intent of RSA 485:61.

(c) The department shall approve a request for a waiver upon finding that:

- (1) The requirement for which a waiver is requested is not a statutory requirement; and
- (2) The health and safety of the population served by the water system will not be compromised if the waiver is granted.

(d) No waiver shall be granted which, in the judgment of the department, contravenes the intent of RSA 485:61 or these rules.

(e) The department shall issue a written response to a request for a waiver within 45 days of receipt of the request. If the department denies the request, the reasons(s) for the denial shall be clearly stated in the written response.

Env-Ws 390.10 Application. A water user shall submit a report that demonstrates compliance with Env-Ws 390.01 through Env-Ws 390.08 in accordance with this section.

(a) For an application for a new source of groundwater for small community water systems, the report shall be submitted with the preliminary report required by Env-Ws 378.11.

(b) For an application for a new source of groundwater for a large community water system, the report shall be submitted with the preliminary report required by Env-Ws 379.13.

(c) For an application for a new large groundwater withdrawal, the report shall be submitted with the minor large withdrawal designation request required by Env-Ws 387.09 or the major large withdrawal application required by Env-Ws 388.10.

(d) For an application for a new bottled water source, the report shall be submitted with the report required by Env-Ws 389.19.

(e) For a new withdrawal from a surface water body associated with a project requiring a 401 Water Quality Certification, the report shall be submitted with the application for a 401 Water Quality Certification.

(f) For a consecutive water system, the report shall be submitted to the department within 90 days of being notified by the department that the wholesale water system which supplies it water has applied for a new source of water.

Env-Ws 390.11 Public Notification and Involvement.

(a) Within 7 days of submitting the report required by Env-Ws 390.10, the water user shall provide a copy of the application and report via certified mail to:

(1) The governing board of:

- a. The municipality in which a proposed new source subject to Env-Ws 390.02 is located;
- b. All municipalities that receive water from the water system; and
- c. All wholesale customers of the water system; and

(2) The regional planning commission established in accordance RSA 36:46 for the location of a proposed new source.

(b) The water user shall provide the governing boards described in (a)(1), above, a summary of the requirements of Env-Ws 390, which will be prepared by the department.

(c) The water user shall request that the governing boards described in (a)(1), above, amend the site planning requirements to:

- (1) Reflect the requirements of Env-Ws 390 when applicable; and
- (2) Promote water conservation landscaping for new projects.

(d) Entities notified pursuant to (a), above, may provide the department with written comments regarding the application within 21 days of receiving the document from the water user.

Env-Ws 390.12 Conditional Approval.

(a) The department shall issue or deny conditional approval to operate a new source of water subject to Env-Ws 390 within 45 days of receipt of the report prepared in accordance with Env-Ws 390.10.

(b) The department shall conduct a site visit within 30 days of receipt of the report prepared in accordance with Env-Ws 390.10 in order to:

- (1) Review the report with the water user; and
 - (2) Assess the accuracy of the processes described in the report.
- (c) The department shall issue conditional approval to operate a new source when:
- (1) The information in the report produced in accordance with Env-Ws 390.10 is complete and correct;
 - (2) The information in the report produced in accordance with Env-Ws 390.10 demonstrates that the water conservation measures required by Env-Ws 390.01 through Env 390.08 are being or will be implemented;
 - (3) Public notification has been completed in accordance with Env-Ws 390.11; and
 - (4) The requirements of the statutes identified in Env-Ws 390.02 are complied with.
- (d) The department shall deny conditional approval if:
- (1) The report submitted pursuant to Env-Ws 390.10 does not show compliance with the requirements of Env-Ws 390; or
 - (2) Public notification is not completed in accordance with Env-Ws 390.11.

(e) The department shall deny the use of a new source of water by a consecutive water that has not showed compliance with Env-Ws 390.

Env-Ws 390.13 On-Going Compliance with Water Conservation Rules.

(a) The water user shall provide the following information provided on a form supplied by the department once every 3 years from the date of conditional approval issued in accordance with Env-Ws 390.12:

- (1) Name, mailing address, and daytime telephone number of the water user;
- (2) Name, mailing address, and daytime telephone number and, if available, fax number and e-mail address of the individual responsible for maintaining compliance with Env-Ws 390 on behalf of the water user; and
- (3) An explanation of how compliance with the requirements of Env-Ws 390.04 through Env-Ws 390.06 is being achieved.

(b) The department shall verify compliance with the requirements of the conditional approval when conducting sanitary surveys of the water systems.

Env-Ws 390.14 Suspension or Revocation of Conditional Approval.

(a) Any approval issued by the department shall be issued based on the presumption that the information submitted by the water user is true, complete and not misleading and that the water user is in compliance with the requirements of Env-Ws 390.

(b) If, after the issuance of an approval, the department receives information that indicates that the information upon which the approval was based was not true and complete or was misleading or that the water user is not complying with applicable requirements of Env-Ws 390, the department shall notify the water user of the date, time and place of a hearing at which the water user shall be given an opportunity to show cause why the approval should not be revoked, which notice and hearing shall be in accordance with RSA 541-A:31.

(c) If as a result of the hearing the department determines that the approval would not have been issued if true and complete information had been presented at the time of the application and that the water user cannot or will not conform to applicable requirements, the department shall revoke the approval.

(d) If as a result of the hearing the department determines that the approval would not have been issued if the true and complete information had been presented at the time of the application but that the site can be made to conform to the requirements of the rules, the department shall suspend the approval and shall reinstate the approval upon receiving proof from the water user that compliance has been achieved.